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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,279	11/12/2001	Naohiro Yasuda	2271/66021	6922

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EXAMINER

BURLESON, MICHAEL L

ART UNIT PAPER NUMBER

2625

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,279

Applicant(s)

YASUDA, NAOHIRO

Examiner

Michael Burleson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4, 7, 9-11, 15-19, 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8, 13, 14 and 20-23 is/are rejected.
- 7) ☒ Claim(s) 5 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/12/2005 have been fully considered but they are not persuasive.
2. Applicant respectfully submits that claims 1,6 and 8 are patentable over the prior art of Kazumasa JP 10-233925.
3. Regarding claim 1, Applicant states that Kazumasa does not teach that a previously specified value is stored for use as the standard white image data for the pixels that are determined to be abnormal by said abnormal white image pixel detection device. Examiner disagrees with Applicant. Kazumasa teaches that $W(n)$, $W(n-2)$ and $W(n+2)$ are white pixel criteria used to determine an abnormal pixel (paragraph 0021 and 0022). The $W(n)$, $W(n-2)$ and $W(n+2)$ can easily be read as a previously specified value stored for use as the standard white image data for pixels that are determined to be abnormal. This also applies to claims 6 and 8. Rejection of claims 1,6 and 8 are maintained.
4. Regarding claims 13,14 and 20-23, contain non-statutory subject matter. Claims 13,14 and 20-23 are rejected.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter.

Regarding claims 13,14 and 20-23, Claims 13,14 and 20-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The computer program product claimed is merely a set of instructions per se. Since the computer program product is merely a set of instructions not embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Koike Kazumasa.

3. Regarding claim 1, Kazumasa teaches of a scanner section (2) (paragraph 0013), this reads on an image sensor configured to read an image of an original document to generate read image data. Kazumasa teaches of a scanner section (2) that performs shading compensation (paragraph 0013), which reads on a shading correction device configured to perform a shading correction on said read image data. He teaches of a malfunction detection section (3) that performs abnormal pixel detection based on white image data (paragraph 0014 and 0019), which reads on an abnormal white image pixel detection device configured to examine a value of standard white image data on a pixel-by-pixel basis to determine whether or not pixels are abnormal, wherein the standard white image data is acquired by reading a white image which is a standard for a shading correction. Kazumasa teaches that before reading a manuscript, the white plate is read and the data is stored and an abnormal pixel is detected based on the previous data (page 2, paragraph 0010 – page 3, paragraph 0011). Kazumasa teaches $W(n)$, $W(n-2)$ and $W(n+2)$ are white pixel criteria used to determine an

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abnormal pixel (paragraph 0021 and 0022), which reads on a previously specified value is stored for use as the standard white image data for the pixels that are determined to be abnormal by said abnormal white image pixel detection device.

4. Regarding claim 6, Kazumasa teaches of a scanner section (2) (paragraph 0013 and 0014), this reads on acquiring standard white image data by reading a white image. He teaches of a malfunction detection section (3) that performs abnormal pixel detection based on white image data (paragraph 0014 and 0019), which reads on determining whether or not the standard white image data is abnormal by examining the standard. Kazumasa teaches $W(n)$, $W(n-2)$ and $W(n+2)$ are white pixel criteria used to determine an abnormal pixel (paragraph 0021 and 0022), which reads on storing a previously specified value as the standard white image data for the pixels that are determined to be abnormal.

5. Regarding claim 8, Kazumasa teaches of a scanner section (2) (paragraph 0013), this reads on an image sensor means for reading an image of an original document to generate read image data. Kazumasa teaches of a scanner section (2) that performs shading compensation (paragraph 0013), which reads on a shading correction means for performing a shading correction on said read image data. He teaches of a malfunction detection section (3) that performs abnormal pixel detection based on white image data (paragraph 0014 and 0019), which reads on an abnormal white image pixel detection means for examining a value of standard white image data on a pixel-by-pixel basis to determine whether or not pixels are abnormal, wherein the standard white image data is acquired by reading a white image which is a standard for

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a shading correction. Kazumasa teaches $W(n)$, $W(n-2)$ and $W(n+2)$ are white pixel criteria used to determine an abnormal pixel (paragraph 0021 and 0022), which reads on a previously specified value is stored for use as the standard white image data for the pixels that are determined to be abnormal by said abnormal white image pixel detection means.

Allowable Subject Matter

6. Claims 2-4, 7, 9-11, 15-19, 24 and 25 are allowed.
7. Regarding claim 2, Prior art fails to teach of a image data correction device configured to correct a value of continuous pixels, which is determined to be abnormal when the image of the original document is read, based on a value of a normal pixel around the continuous abnormal pixels on which the shading correction is performed, when the number of the continuous abnormal pixels is within a predetermined allowable number and a previously specified value is stored for use as the standard white image data for pixels that are determined to be abnormal by said abnormal white image pixel detection device, and wherein the value of the standard white image data for all of pixels in a region in which the number of the pixels which are determined to be abnormal and for which the previously specified value is stored exceeds the predetermined allowable number, is replaced with a predetermined value.

8. Regarding claim 7, Prior art fails to teach of a method of replacing the value of the standard white image data for the pixels in a second region, in which the number of pixels stored with the previously specified value exceeds the predetermined allowable number, with a predetermined value.

9. Regarding claim 9, Prior art fails to teach of a image data correction means for correcting a value of continuous pixels, which is determined to be abnormal when the image of the original document is read, based on a value of a normal pixel around the continuous abnormal pixels on which the shading correction is performed, when the number of the continuous abnormal pixels is within a predetermined allowable number and a previously specified value is stored for use as the standard white image data for pixels that are determined to be abnormal by said abnormal white image pixel detection device, and wherein the value of the standard white image data for all of pixels in a region in which the number of the pixels which are determined to be abnormal and for which the previously specified value is stored exceeds the predetermined allowable number, is replaced with a predetermined value.

10. Regarding claim 15, Prior art fails to teach of replacing white pixel values detected as abnormal in the examining step with replacement pixel values to thereby generate shading correction data having at least one region of replacement pixel values.

11. Regarding claim 24, Prior art fails to teach of a shading correction circuit coupled to said reading and digitizing station and said abnormal pixel detection circuit to replace white pixel values identified as abnormal with replacement pixel values to thereby

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generate shading correction data having at least one region of replacement pixel values and to use said shading correction data to carry out shading correction of document pixel values to thereby produce shading-corrected document pixel data.

12. Claims 5 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

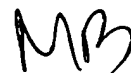
Conclusion

Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (571) 272-7460 and fax number is (571) 273-7460. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437.



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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Patent Examiner
Art Unit 2626



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March 2, 2006